The listing of claims will replace all prior versions, and listings, of claims in this application:

<u>Listing of Claims:</u>

1. (Currently amended) A hearing aid with detection and automatic selection of an input signal,
     comprising<u>:</u>

at least two analog input signal sources,

at least one analog-to-digital converter for generating, from an analog input signal, a
     corresponding digital input signal, [[and]]

further processing means for digital processing of input signals,

~~wherein the hearing aid further comprises~~ input signal routing means for selectively routing each
     one of one or more selected input signals to the further processing means,<u> the input signal
     routing means being an analog input multiplexer,</u> [[and]]

signal detection means configured to ~~analyse~~ <u>perform an analysis of </u>the analog input ~~signals~~
     <u>signal </u>and to control the signal routing means according to results of said analysis<u>,</u>

<u>signal detection means configured to analyse a single signal, and</u>

<u>a further input multiplexer for alternately selecting one of the analog input signal sources and
     feeding the analog input signal to the signal detection means</u>.

2. (Currently amended) The hearing aid according to claim 1, configured to cause, when the
     signal detection means detects a relevant signal on a given analog input signal, an analog-to-
     digital converter to digitise said analog input signal and to transmit the <u>corresponding </u>digital
     input signal to the further processing means.

3. (Currently amended) The hearing aid according to claim 2, ~~further comprising an ~~<u>wherein the</u>
     analog input multiplexer [[for]] selectively ~~routing ~~<u>routes </u>each one of one or more selected

analog input signals to an associated analog-to-digital converter, and where~~in~~ the analog input multiplexer is configured to be controlled according to the ~~analysis~~ results of the analysis of the signal detection means.

4. (Cancelled)

5. (Currently amended) The hearing aid according to claim 2, configured to maintain circuitry associated with audio signal processing in a powered down state while the signal detection means does not detect a relevant signal, and to power up said circuitry if the signal detection means does detect a relevant signal on [[an]]the analog input signal.

6.   (Cancelled)

7. (Currently amended) The hearing aid according to one of claims 1 to 5, wherein the signal detection means is configured to indicate the presence of a relevant signal in an input signal if [[the]]an amplitude of the input signal exceeds a predetermined amplitude threshold during a predetermined minimum time within a predetermined time window.

8. (Original) The hearing aid according to one of claims 1 to 5, wherein the signal detection means are implemented by analog components or within a mixed-signal integrated circuit.

9. (Currently amended) A method for detecting and automatically selecting an input signal in a hearing aid in which at least two analog input signals are available, comprising the steps of
   * analysing the at least two analog input signals and detecting, for each of the at least two analog input signals, whether it comprises a relevant signal, the analysing being accomplished by providing a single detection circuit through a further input multiplexer alternately with each of the at least two analog input signals,

- selecting, according to results of said ~~analysis~~ <u>analysing</u>, at least one selected input signal that comprises a relevant signal for further processing, and
- controlling a signal routing means to selectively route each one of the at least one selected input ~~signals~~ <u>signal</u> to further processing means<u>, the signal routing means being an analog input multiplexer</u>.

10. (Currently amended) The method according to claim 9, further comprising the step of

- causing, when [[the]]<u>a</u> signal detection means detects a relevant signal on a given analog input signal, an analog-to-digital converter to digitise said <u>given</u> analog input signal and to transmit [[the]]<u>a resulting</u> digital input signal to the further processing means.

11. (Currently amended) The method according to claim 10, further comprising the step of

- controlling, according to the ~~analysis~~ results<u> of said analysing</u> of the signal detection means, an analog input multiplexer to forward each one of the at least one selected input signal to an associated analog-to-digital converter.

12. (Cancelled)

13. (Original) The method according to claim 10, comprising the further step of

- maintaining circuitry associated with audio signal processing in a powered down state while the signal detection means does not detect a relevant signal, and
- powering up said circuitry if the signal detection means does detect a relevant signal on an analog input signal.

14. (Cancelled)

15. (Currently amended) The method according to one of claims 9 to 13, further comprising the
steps of

- determining whether the amplitude of the input signal exceeds a predetermined
amplitude threshold during a predetermined minimum time within a predetermined time
window, and

- indicating the presence of a relevant signal in [[an]]the input signal if this is the case.

16. (Currently amended) The method according to claim 14, further comprising the steps of

- determining whether the amplitude of the input signal exceeds a predetermined
amplitude threshold during a predetermined minimum time within a predetermined time
window, and

- indicating the presence of a relevant signal in [[an]]the input signal if this is the case.

17. (Original) The method according to one of claims 9 to 13, wherein the step of detecting
whether an analog input signal comprises a relevant signal involves analog comparison
operations of the analog input signal or of analog signals derived from the analog input
signal to analog reference signals.